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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/434,027	11/04/1999	MARTIN BLUMENFELD	09531-091001/99186	3391

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EXAMINER

NGUYEN, TU T

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/434,027

Applicant(s)

BLUMENFELD ET AL.

Examiner

Tu T. Nguyen

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 and 39-97 is/are pending in the application.
- 4a) Of the above claim(s) 39,40,52,53,66-77 and 88-97 is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 78-87 is/are rejected.
- 7) ☒ Claim(s) 1-37,39-65 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

Detailed Office Action

Claim Objections

Claims 1,27,41 are objected to because of the following informalities:

1) Claim 1, lines 3-4; claim 27, lines 3-4; claim 41, lines 3-4, "a chip" should be changed to "a nucleic acid chip".

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 78-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (4,088,561) in view of Lakowicz (WO 99/36578).

With respect to claim 78, Anderson discloses a sample holder. The holder comprises a light-transmitting material top and bottom surfaces (fig 4). Anderson does not explicitly the sample is an immobilized nucleic acid sequences. However, it would have been obvious a design choice to substitute Anderson's sample with different types for different purposes. The modification involves only routine skill in the art.

With respect to claim 79, Anderson does not disclose a filter. Lakowicz discloses a filter (fig 1). It would have been obvious to add Lakowicz's filter to Anderson's sample holder to filter out the unwanted wavelengths.

With respect to claims 80-81, Lakowicz discloses the filter. However, Lakowicz does not explicitly disclose the claimed wavelength range for the filter. Since Lakowicz discloses the filter, it would have been obvious a design choice to choose different wavelength ranges for testing different characteristics of the sample.

With respect to claims 82-87, the claimed optical lens would have been known in the art. It would have been obvious to modify Anderson with the known optical lens to utilize the system. Further, it would have been obvious a design choice to choose the lens with different focal length to test different characteristic of the sample.

Allowable Subject Matter

Claims 1-37,39-65 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Prior arts of record does not disclose a device for detecting the pattern of polynucleic acid hybridization to a surface. The device comprises: a holder, a nucleic acid chip, a light source, wherein the sampling position is a position that places the sample surface of the chip in a well defined spatial relationship relative to the electronic light detector array so that the source light that touches a chip address on the sample surface is substantially directed to

substantially one detector pixel with an address that is correlated to the chip address which structurally arranged and functionally operated as claimed in claims 1,27,41.

Response to Arguments

Applicant's arguments filed on 06/16/2003 have been fully considered but they are not persuasive.

Applicant's arguments on claims 1-37,39-65 are moot. claims 1-37, 39-65 are allowed.

With respect to Applicant's argument on page 14, the Applicant's argument is irrelevant because claims 78-87 are not rejected over King in view of Anderson and Lakowicz as argued. The rejection is based on Anderson in view of Lakowicz. Anderson clearly discloses a chip being made of a light-transmitting material (fig 4).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu T Nguyen whose telephone number is (703) 306-9185. The examiner can normally be reached on M-T 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G Font can be reached on (703) 308-4881. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Tu T. Nguyen
Primary Examiner
Group Art Unit 2877

9/30/03